

# HALF SIZE HCMOS TRI-STATE ENABLE/DISABLE OSCILLATOR

## H5C-2

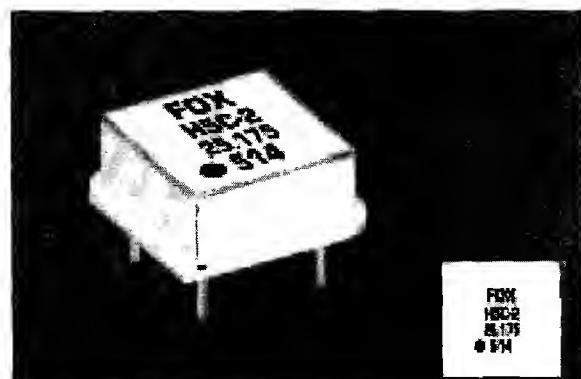
The H5C-2 Clock Oscillator employs a tri-state function for control of the output. Applying a logic '1' to pin 1 enables the oscillator output and a logic '0' to pin 1 disables the output to a high impedance state called High Z state. This allows for testing by automated test equipment by having the part appear as removed from the circuit. The package is all metal with pin 4 as case ground which provides shielding to help minimize EMI radiation.

### FEATURES

- 8 Pin Dip
- 15 pF HCMOS Load
- 10 TTL Fanout
- Tri-state Enable/Disable
- 45/55 Symmetry (to 80 MHz)
- Fast Rise/Fall Times
- -40°C to +85°C Available

#### • PART NUMBER SELECTION

Frequency Stability	Part Number
±100PPM	H5C-2
±50PPM (up to 90MHz)	H6C-2
±25PPM (up to 50MHz)	H7C-2



Actual Size



H5C-2 50.000MHz IT

#### • ELECTRICAL CHARACTERISTICS (Ta = 25°C, VDD = 5.0V, CL = 15pF)

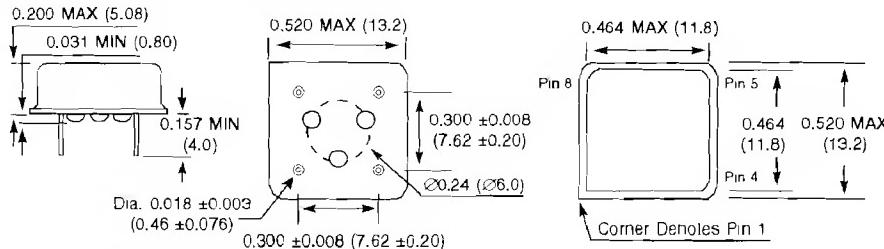
PARAMETERS	FREQUENCY RANGE	CONDITIONS	MIN	MAX	UNITS
Frequency Range (Fo)			1.544	100.000	MHz
Frequency Stability	1.544 ~ 100.000	All Conditions *	-100	+100	PPM
Temperature Range	1.544 ~ 100.000				
Operating (TOPR)			-10	+70	°C
Storage (TSTG)			-55	+125	
Supply Voltage (VDD)			+4.5	+5.5	V
Input Current (IDD)	1.544 ~ 25.000 25.000+ ~ 50.000 50.000+ ~ 80.000 80.000+ ~ 100.000			20 35 59 69	mA
Output Symmetry	1.544 ~ 80.000 80.000+ ~ 100.000	2.5V	45 40	55 60	%
Rise Time (TR)	1.544 ~ 100.000	0.5V ~ 4.5V		5	nS
Fall Time (TF)		4.5V ~ 0.5V		5	
Output Voltage (VOL) (VOH)	1.544 ~ 100.000	IOL = 16 mA IOH = -16 mA		0.5	V
Output Current (IOL) (IOH)	1.544 ~ 100.000	VOL = 0.5 V VOH = 4.5 V		16 -16	mA
Output Load	1.544 ~ 100.000	TTL HCMOS		10 15	TTL pF
Start-up Time (TS)	1.544 ~ 100.000			10	mS
Output Enable/Disable Time	1.544 ~ 100.000			100	nS

\* Inclusive of 25°C tolerance, operating temperature range, input voltage change, load change, aging, shock, and vibration.

\*\*\* An internal pullup resistor from pin 1 to pin 8 allows active output if pin 1 is left open.

See page 35 for mechanical specifications, test circuits, and output waveform.

All specifications subject to change without notice. Rev. 5/20/98



Inch dimensions shall govern.

All dimensions are in inches & parenthetically in millimeters.

#### • ENABLE / DISABLE FUNCTION\*\*

INH (Pin 1)	OUTPUT (Pin 5)
OPEN ***	ACTIVE
'1' Level $V_{IH} \geq 2.2$ V	ACTIVE
'0' Level $V_{IL} \leq 0.8$ V	High Z

Pin Connections  
#1 E/D\*\* #5 Output  
#4 GND (Case) #8 +5VDC